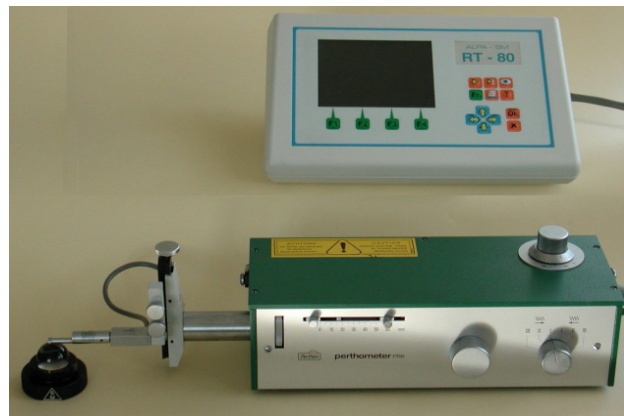
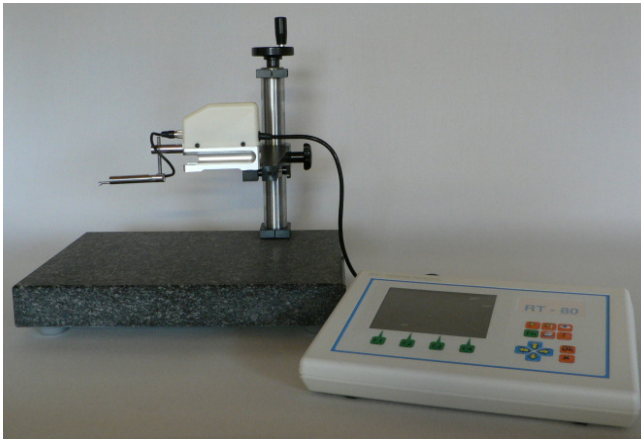


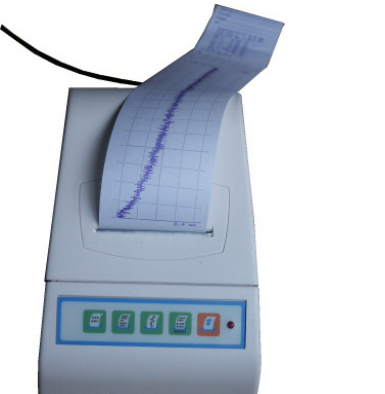
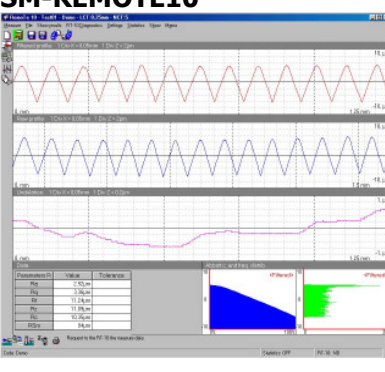


Roughness surface tester



You are looking for a mobile or stationary surface measuring system extensible for the future ?
We propose you systems easy to use for the laboratory and shop floor.Existing systems at the customers side
e.g. Mahr, Taylor Hobson can be upgraded easily with our software running on Windows XP.

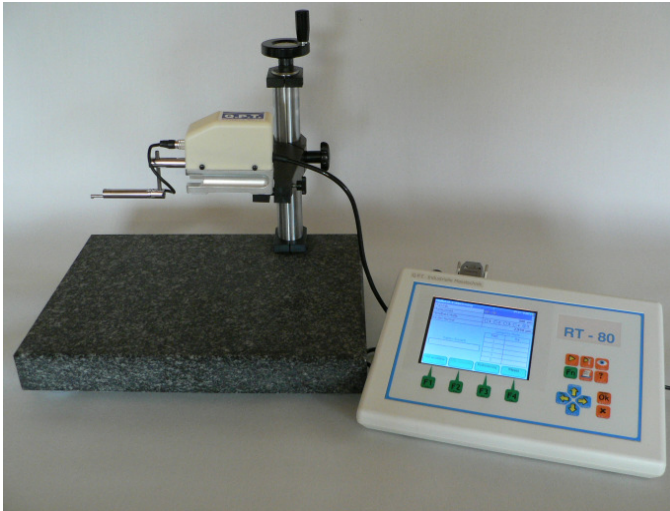
Portable roughness tester RT10

Order-no.	Description	Price in€																
<p>SM-RT10</p>  	<p>Mobile surface tester with integrated screen. The probe maybe turned by 90° to permit measurements in grooves between shoulders (e.g. crankshaft). On the integrated display, which is shielded by a special protective membrane, the roughness parameters can be read easily. Up to 30 measurements can be saved to ensure the mobility. Delivered with skidded pickup SM-SB10, V-block, roughness master. Languages : english, french, german, italian</p> <p>Specifications :</p> <table border="0"> <tr> <td>Tracing length:</td> <td>Up to 16 mm</td> </tr> <tr> <td>Measuring range:</td> <td>±20 µm and ±80 µm</td> </tr> <tr> <td>Resolution (internal) :</td> <td>0,01 µm and 0,04 µm</td> </tr> <tr> <td>Cut-Off length:</td> <td>0,25/ 0,8/ 2,5 mm</td> </tr> <tr> <td>Number of Cut-off</td> <td>2 to 5 variable</td> </tr> <tr> <td>Filters :</td> <td>Gauss, ISO11562</td> </tr> <tr> <td>Parameters :</td> <td>Ra, Rz, Rq, Rt, Rmax, Pc, RSm, Rmr</td> </tr> <tr> <td></td> <td>ISO 1085 : Pt, R, AR, Rx</td> </tr> </table>	Tracing length:	Up to 16 mm	Measuring range:	±20 µm and ±80 µm	Resolution (internal) :	0,01 µm and 0,04 µm	Cut-Off length:	0,25/ 0,8/ 2,5 mm	Number of Cut-off	2 to 5 variable	Filters :	Gauss, ISO11562	Parameters :	Ra, Rz, Rq, Rt, Rmax, Pc, RSm, Rmr		ISO 1085 : Pt, R, AR, Rx	
Tracing length:	Up to 16 mm																	
Measuring range:	±20 µm and ±80 µm																	
Resolution (internal) :	0,01 µm and 0,04 µm																	
Cut-Off length:	0,25/ 0,8/ 2,5 mm																	
Number of Cut-off	2 to 5 variable																	
Filters :	Gauss, ISO11562																	
Parameters :	Ra, Rz, Rq, Rt, Rmax, Pc, RSm, Rmr																	
	ISO 1085 : Pt, R, AR, Rx																	
<p>SM-PR10</p> 	<p>Printer for SM-RT10 for the documentation of parameters with tolerances, profiles, Abbot-curve and amplitude density curve. With rechargeable batteries.</p>																	
<p>SM-REMOTE10</p> 	<p>Evaluation Software for Windows 98/2000/XP (as option or alternatively to the printer)</p> <p>the software Remote 10 allows to control the RT10. the possibility to visualize the filtered and non-filtered profile, the waviness, the Abbot curve, the amplitude density curve and the parameters with tolerances and statistique completes the whole surface measurement.</p>																	

Order-no.	description	Price in€
BE-RTMG-M 	Stand for RT10 or TS7 with granite plate 400x300 mm and fixation. Column height 300mm. (by changing the fixation, other roughness units can be adapted. e.g. Mahr, Zeiss, Mitutoyo, etc.)	
SM-SB10 	Standard skidded pickup SB10 for RT10 or drive unit TS7 For bores greater than $\varnothing 10$ mm	
SM-SB20 	Skidded pickup SB20 for RT10 or drive unit TS7 5mm cranked for grooves up to a depth of 5mm	
SM-SB30 	Skidded pickup SB30 for RT10 or drive unit TS7 3,5 mm cranked for bores greater than $\varnothing 4$ mm	
SM-SB40 	V-typed pickup SB40 for RT10 or drive unit TS7 For measuring cylinders or wires	
SM-SB50 	Skidded pickup SB50 for RT10 or drive unit TS7 For flat or concave surfaces	

RT80 – the compact stationary system

compact, solid and easy to use



The surface tester SM-RT80 measures roughness and evaluate parameters according to the following standards: ISO 4287, ISO 12085 (MOTIF or CNOMO), DIN, ASME, JIS. Due to the membrane protected keyboard, easy handling and small dimensions, it can be used in the laboratory or on the shop floor as well. The instrument has an efficient warning and error management. It warns and blocks any erroneous operation or anomaly, during setup and measuring phase.

It has an internal Memory of 400Kbyte for storing hundreds of measurements. There are two storing modes: Memo and statistics. With the Memo mode the measurements are stored, in order to display and/or print them. With the Statistics the measurements are stored on a maximum of 12 parameters, to perform various statistic analysis including their graphs and histograms which can be displayed or printed out. For simple printout the SM-PR10 (see SM-RT10) can be used.

The measurement is adjustable by the **Measure Setup**. In this menu following parameters can be changed:

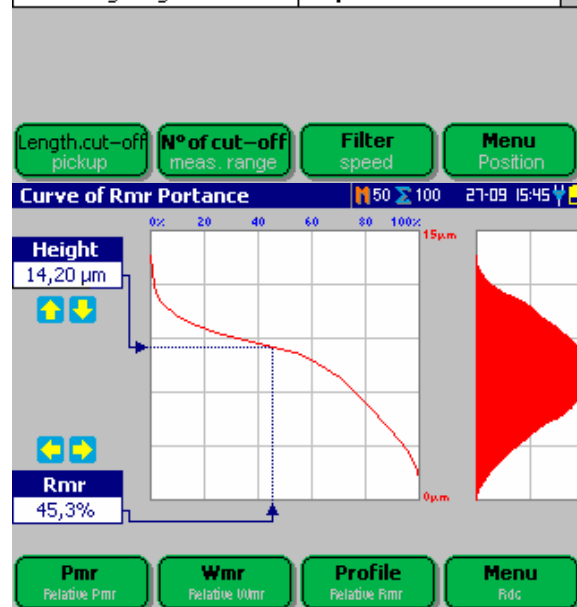
- **cut-off length** (0,08 - 0,25 - 0,8 - 2,5mm)
- **cNo. of cut-off** (1-8)
- **filter** (Gaussian, 2CR, 2CR Correct Phase)
- **measuring speed** (0,5 - 1mm/sec)
- **measuring range** (30 - 60 - 150 - 300µm).

The measuring length is automatically setup by selecting the cut-off length, depending from the number of cut-off from 1 and 8.

Specifications:

- Standards: ISO, DIN, ASME, JIS.
 - 6" LCD color display;320x240pixel with 16 colors
 - 16 keys Interactive keyboard
 - Resolution: Up to 0,001µm
 - Automatic pickup selection
 - Profile measurement and evaluation.
 - Tolerances control on results.
 - Statistical evaluation.
 - 400Kbytes Memory for data Storage.
 - Serial RS232C interface for PC connection
 - Printer interface, Expansion interface
- Languages:German, English,French,Italian, Spanish

Setup	
meas.	Parameter
cut-off length	0,8 mm
No of cut-off	5
measuring length	4,8 mm
Filter	Gaussian
measuring speed	1 mm/sec
pickup	SB-10
measuring range	30 µm

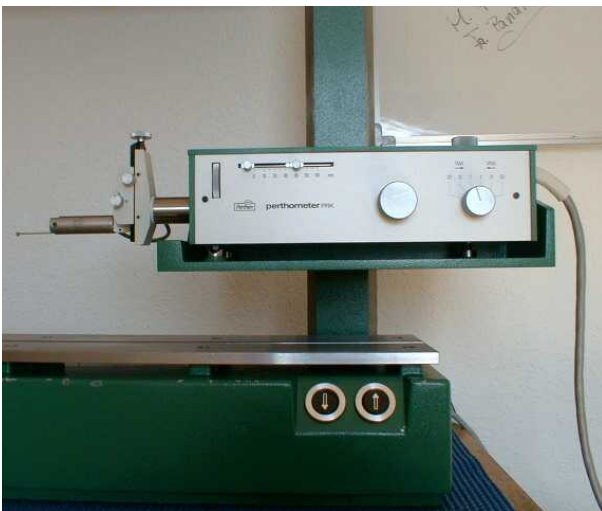


Drive units connectable to the RT80



Portable drive unit SM-TS7:

Traverse length:	Up to 25 mm max.
Measurement speed:	1 mm / s
Return speed:	2 mm / s
Measuring positions:	Horizontal vertical upside down
Pickup height adjustment:	50 mm
Dimensions(LxHxD) :	145x85x45 mm
Weight :	800 Gr.
Pickup (same as for RT-10):	With skid SM-SB-10 SM-SB-20 SM-SB-30 SM-SB-40 SM-SB-50



Drive unit PRK (Mahr-Feinprüf-Perthen)

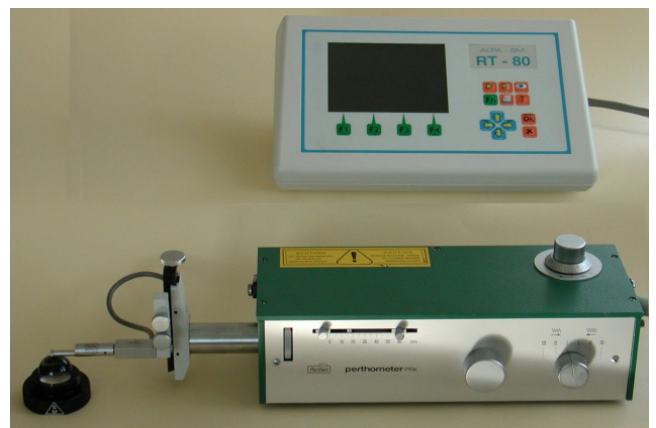
The skidless tracing system drive unit PRK can be connected to the RT-80 via interface box.

Traverse length:	Up to 60 mm
Measuring speed	0,5 mm
Accuracy	0,2 µm
Pickup (Mahr-Perthen)	R-type FRW-750 MFW 250

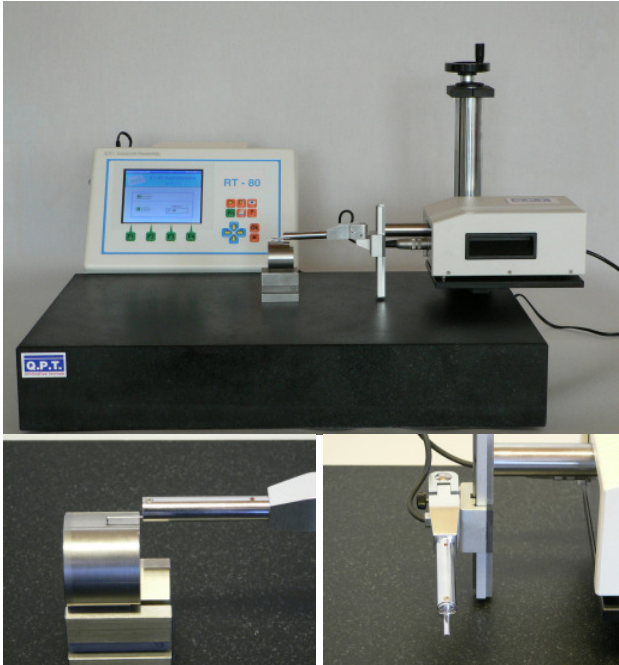
The combination **PRK-RT80** is a ideal upgrade for existing drive units. **No changes have to be done on the drive unit itself !!!**

Just connect the drive unit PRK to the interface and to the SM-RT80 –ready.

For advanced function an optional PC Software is availablex



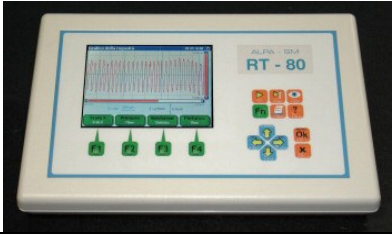

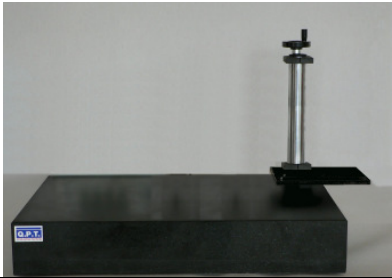
Drive unit TL-90 for skidless roughness measurement connectable to the RT80



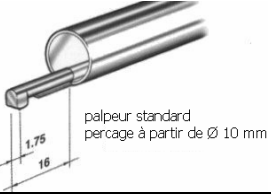
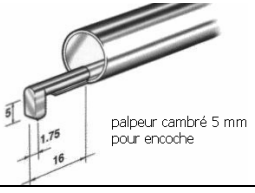
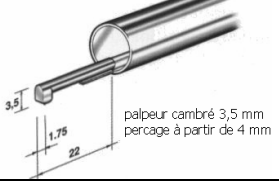
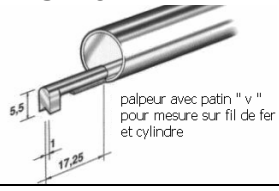


Drive unit TL 90:
 Measuring length: max. 50 mm
 Measuring speed: 1 mm / s
 Repositioning speed: 2 mm / s
 Measuring positions: horizontal
 horizontal 90°
 Pickup height adjustment: 100 mm
 dimensions(LxHxP) : 145x85x45 mm
 Weight : 1,2 kg
 pickup delivered with : SM-SB-60
 (can be used skidded or skidless)

All pickups of the RT 10 can be used

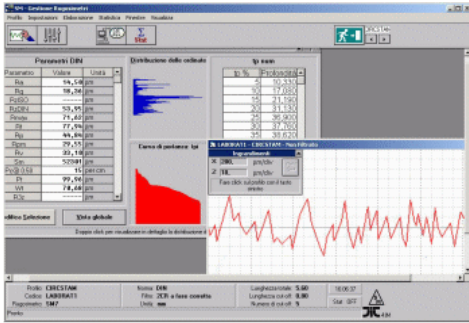
Optional PC-Software Remote 80 available

Order-no.	description	Price in€
<p>SM-RT80</p> 	<p>Control and evaluation unit</p>	
<p>SM-TL90</p> 	<p>Drive unit with standard pickup (SM-SB60) and height adjustment</p>	
<p>SM-STATIV</p> 	<p>Manual stand with column 300mm and granite plate 640x400 mm for TL90</p>	

Pickups for drive unit TL-90

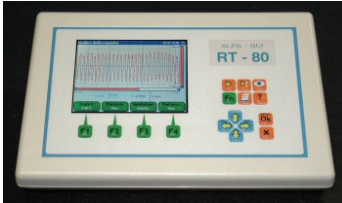



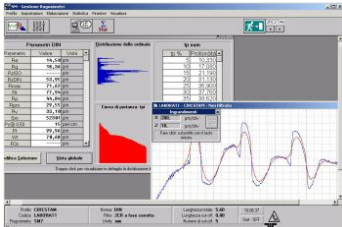
Order-no.	description	Price in€
SM-SB10  <p>palpeur standard perçage à partir de Ø 10 mm</p>	Standard skidded pickup SB10 for RT10 or drive unit TS7 For bores greater than Ø10 mm	
SM-SB20  <p>palpeur cambré 5 mm pour encoche</p>	Skidded pickup SB20 for RT10 or drive unit TS7 5mm cranked for grooves up to a depth of 5mm	
SM-SB30  <p>palpeur cambré 3,5 mm perçage à partir de 4 mm</p>	Skidded pickup SB30 for RT10 or drive unit TS7 3,5 mm cranked for bores greater than de Ø 4 mm	
SM-SB40  <p>palpeur avec patin "v" pour mesure sur fil de fer et cylindre</p>	V-typed pickup SB40 for RT10 or drive unit TS7 For measuring cylinders or wires	
SM-SB50  <p>patin devant la pointe pour surfaces concaves</p>	Skidded pickup SB50 for RT10 or drive unit TS7 For flat or concave surfaces	
SM-SB60  <p>palpeur sans patin pour trous > Ø2mm</p>	Skidless pickup SB60 for roughness and ondulation for bores greater than Ø 2 mm	

Remote80 – the software for Windows

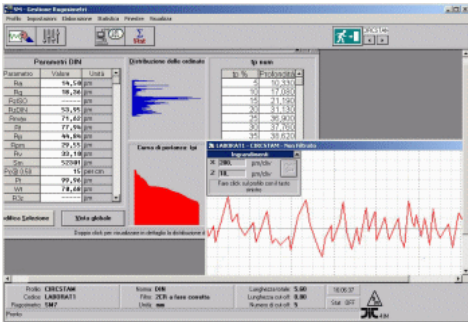


The **REMOTE80 software** has been developed as an standard external analysis interface for the portable roughness tester **SM-RT80**.

All main settings of the RT-80 and basic roughness analysis can be made very user friendly on the PC. The complete documentation of the measurement can be printed out on standard Windows printer.

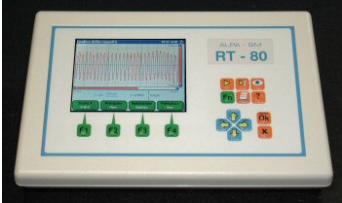



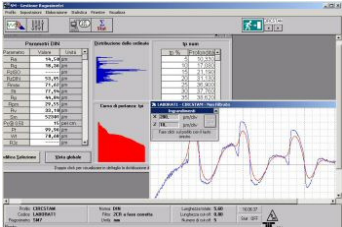
Order-no	description	Price in€
SM-RT80 	Workshop roughness tester control and evaluation unit	
SM-TS7 	Drive unit with Standard pickup SM-SB10 and height adjustment for SM-RT-80	
PRK 	Drive unit PRK	
RT80-PRK 	Upgrading kit (without drive unit PRK), including interface box, connecting cables an evaluation unit SM-RT-80	
SM-REMOTE80 	Measuring and analysis Software for Windows based PC	

Remote80 – the software for Windows



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PRK 	Drive unit PRK	
RT80-PRK 	Upgrading kit (without drive unit PRK), including interface box, connecting cables and evaluation unit SM-RT-80	
SM-REMOTE80 	Measuring and analysis Software for Windows based PC	

Technical specification:

System requirement: Windows based PC with Windows 200 or XP
 Drive unit: Taylor Hobson Talysurf 10, Mahr/ Perthen PRK (others on request)

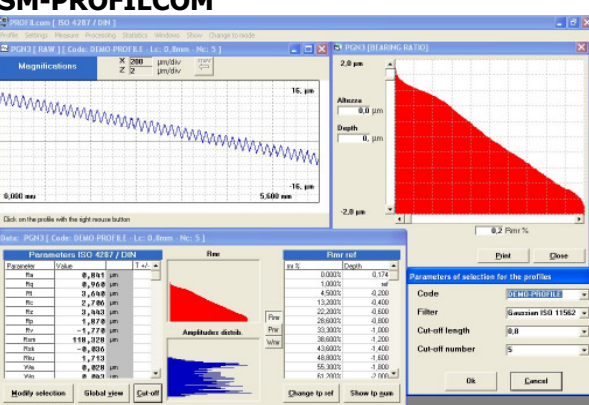
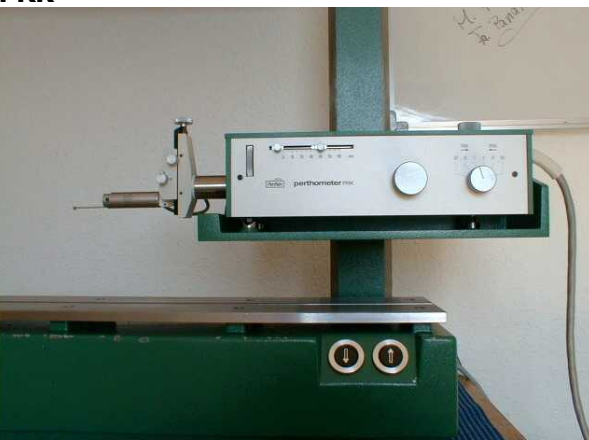
Software: ISO 4287, ISO 12085 (MOTIF / CNOMO), DIN, ASME, JIS

Profile P-, W-, R-profile, Material-ratio-curve (Abbott-curve), Amplitude density curve

Filter: Gaussian, 2CR, 2CR phase corrected

Parameters Ra, Rz, RzDin, R3z, R3zm, Rmax, Pt, Rq, Rt, Ry, Rc, Rp, Rv, ,Rsm, Rsk, Rku, Rk, Rpk, Rvk, Mr1, Mr2, Pa, Pq, Pt, Pc, Pz, Pp, Pv, Psm, Psk, Pku, Wa, Wq, Wt, Wc, Wz, Wp, Wv, Wsm, Wsk, Wku

Languages: German, English, French, Italian, Spanish

Order-no.	Specification	Price in€
<p>SM-PROFILCOM</p> 	<p>Roughness measurement and evaluation Software for Windows based PC / Laptop, Including interface, depending on drive unit.</p>	
<p>PRK</p> 	<p>Drive unit PRK, pickup system (skidded and skidless) and accessories.</p>	

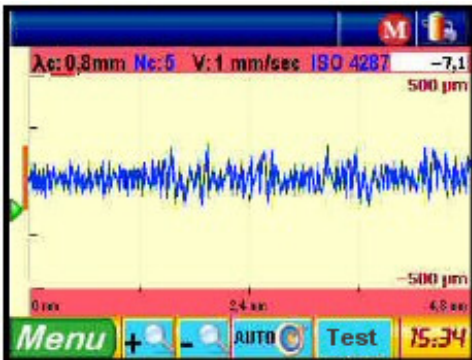
Portable roughness tester with integrated evaluation unit

With skidless pickup SM-SB10-60



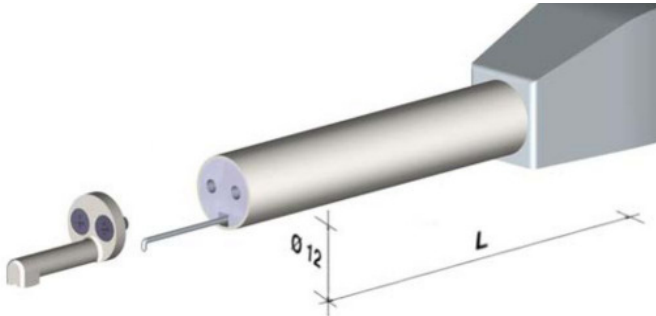
The new universal roughness tester with integrated evaluation unit combines mobility with precise surface measurements with all parameters according to following standards: ISO 4287, 12085, 13565 et DIN.

Standard	Parameter									
ISO 4287	Ra	Rq	Rt	Rz	Rp	Rv	Rc	RSm	Rōc	Rpc
	Pa	Pq	Pt	Pv	Pc	Psm	Pōc	Pcp		
1997	Wa	Wq	Wt	Wz	Wp	Wv	Wc	WSm	Wōc	WPc
ISO 13565	Rk	Rpk	Rvk	Mr1	Mr2					
DIN	Rmax	R3z	R3zm							
ISO 12085	Pt	R	AR	Rx	Wte	AW	Wx	Rke	Rpke	Rvke


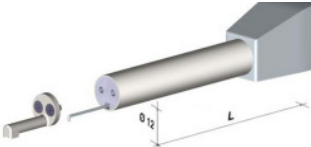




The main advantages of this unit are the easy handling and the protective touch screen with a resolution of 320x240 pixels with 256 colours.

The optional available PC-Software "measurement studio" completes the evaluation and documentation documentation complète sur un ordinateur



The pickup SM-SB10-60 which is delivered with the system can be used as a skidless pickup or with skewed protection as a skidded pickup. Other geometries on request.

Order-no..	Specification	Price in€
	<p>Roughness tester with integrated evaluation</p> <ul style="list-style-type: none"> - resolution 0,001 μm - memory for 3 pickups - memory for 999 profiles - tolerance surveillance - statistique function - serial interface RS232 - LCD color screen 320x240 pixels 16 characters, 2 lines - touch screen protected 	
	<p>Skidded / skidless pickup SM-SB10-60 With skewed protection (skid)</p>	
	<p>Manual stand with column 300mm and granite plate 640x400 mm for TL90</p>	
	<p>Software for PC</p>	